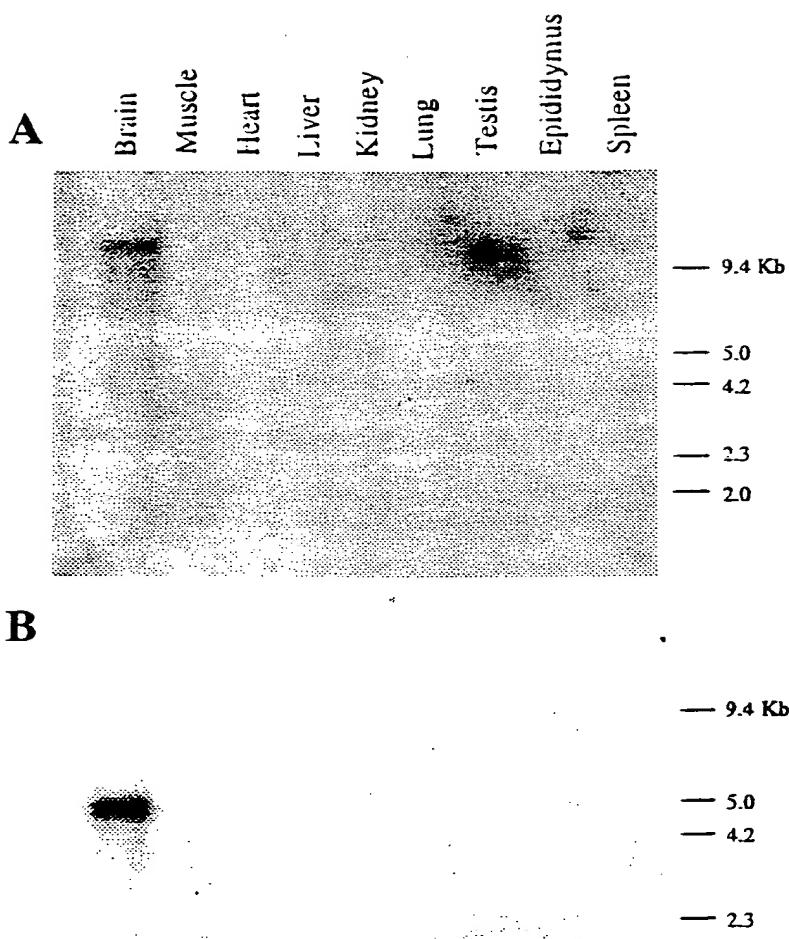
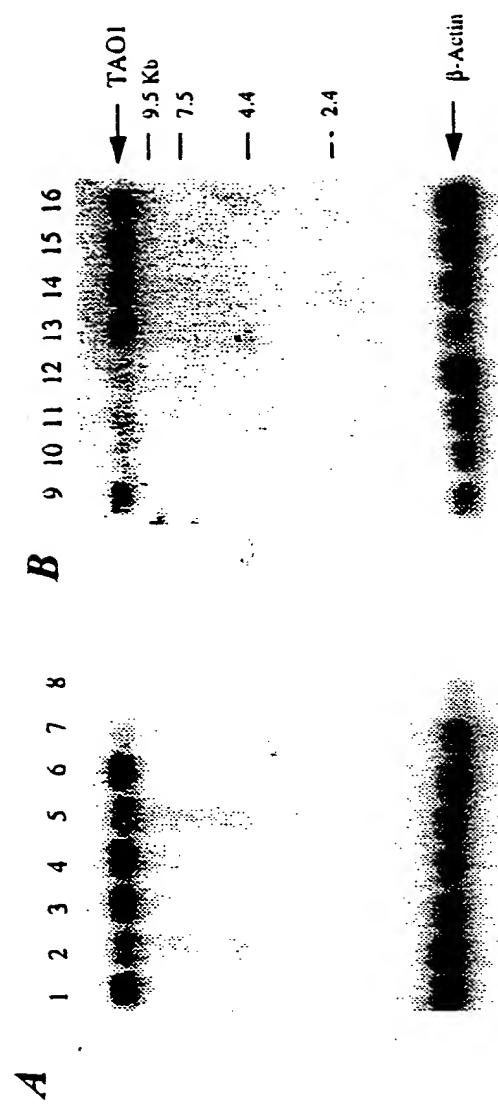


FIG. 1

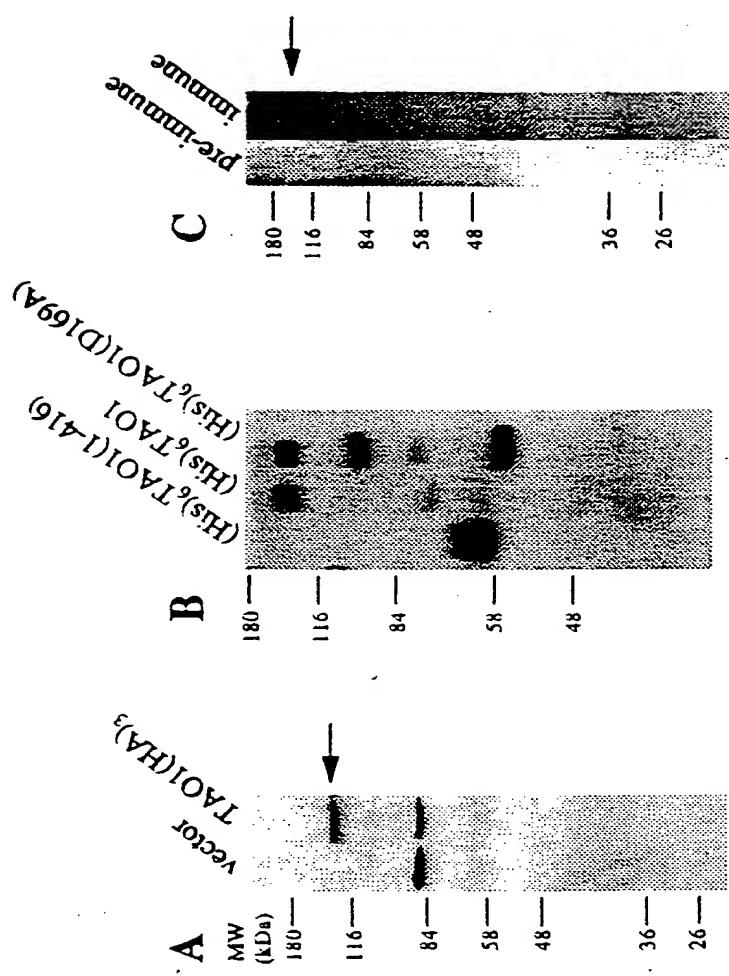
FIG. 2



*FIGS. 3A and 3B*



FIGS. 4A and 4B



FIGS. 5A-5C

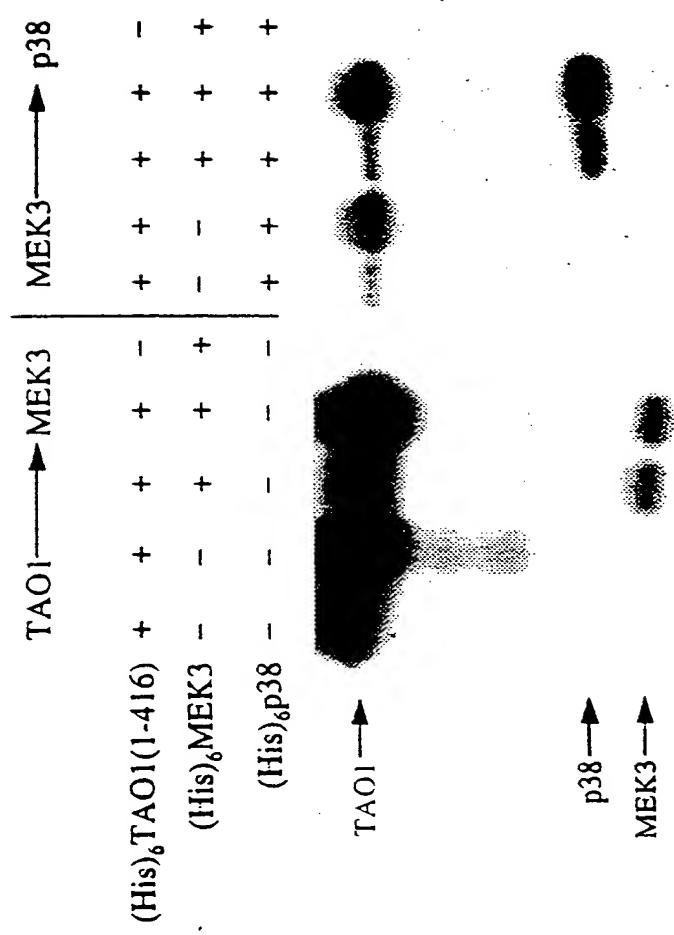


FIG. 6

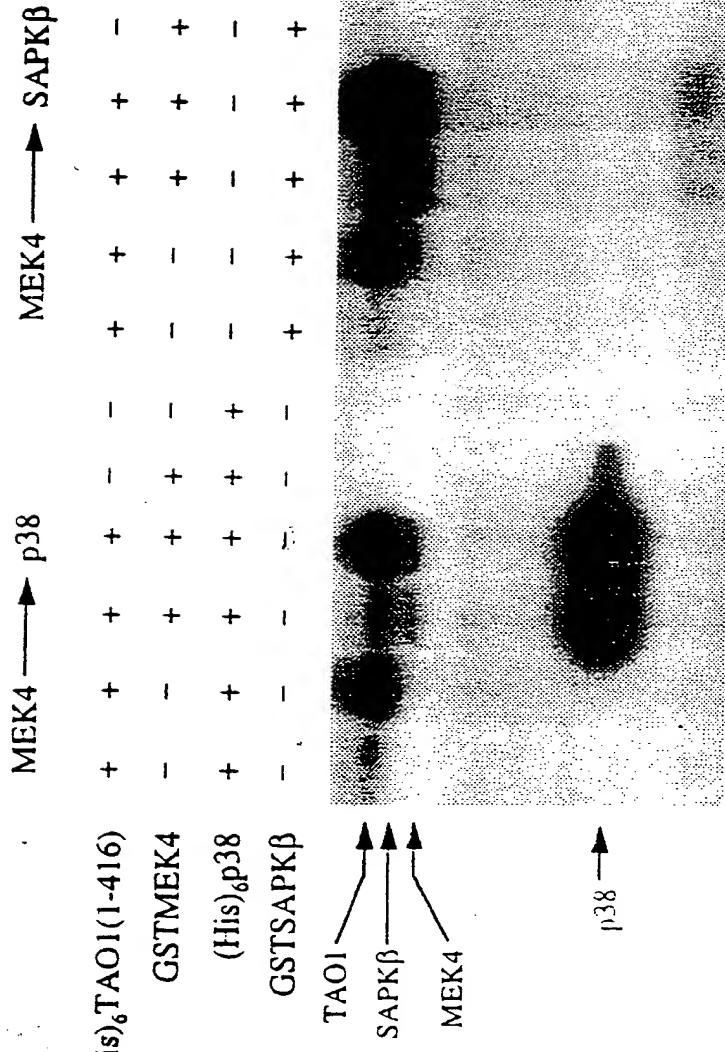


FIG. 7

09686346 3101000

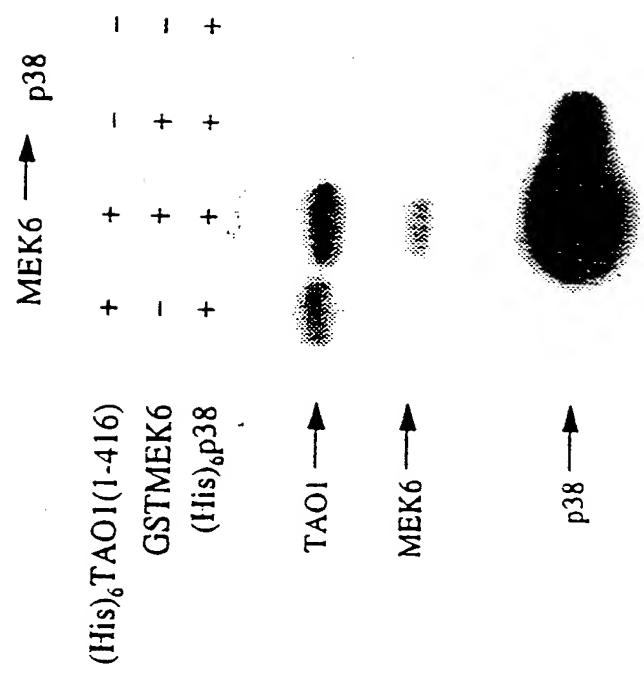
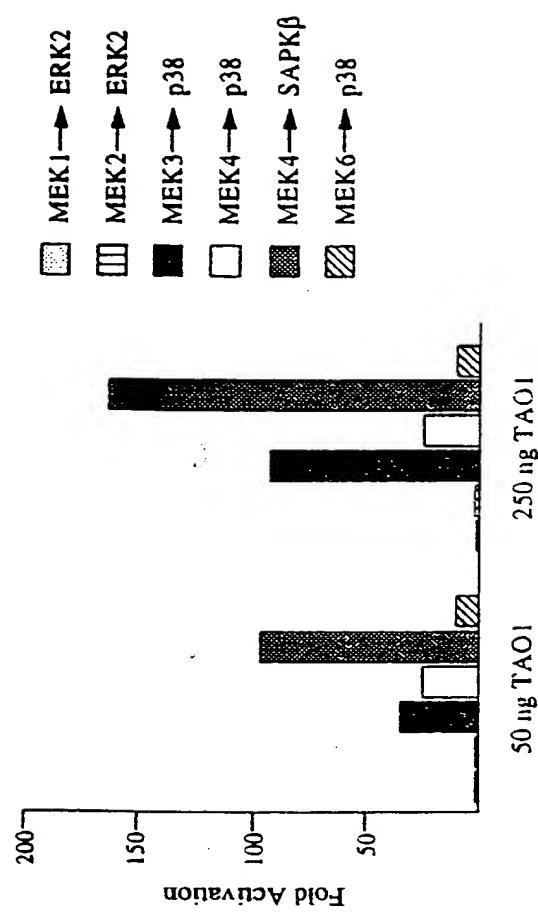
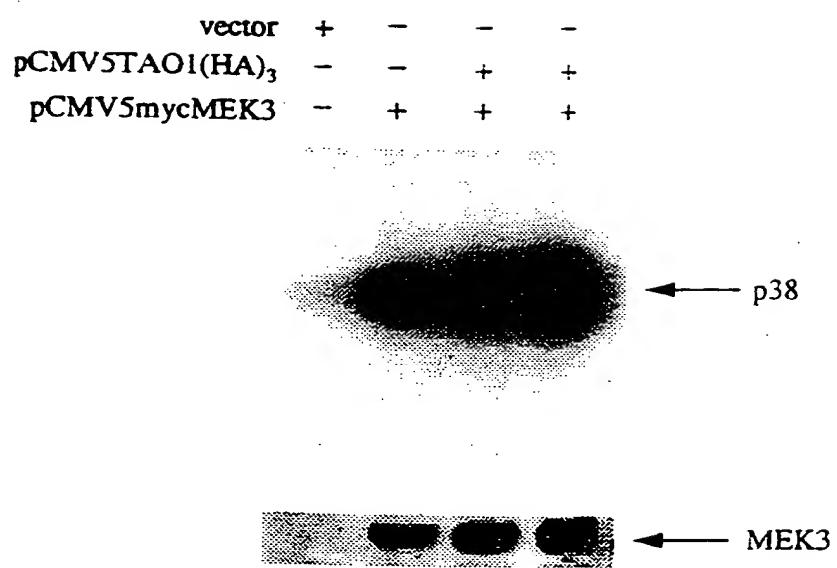


FIG. 8

FIG. 9





**FIG. 10**

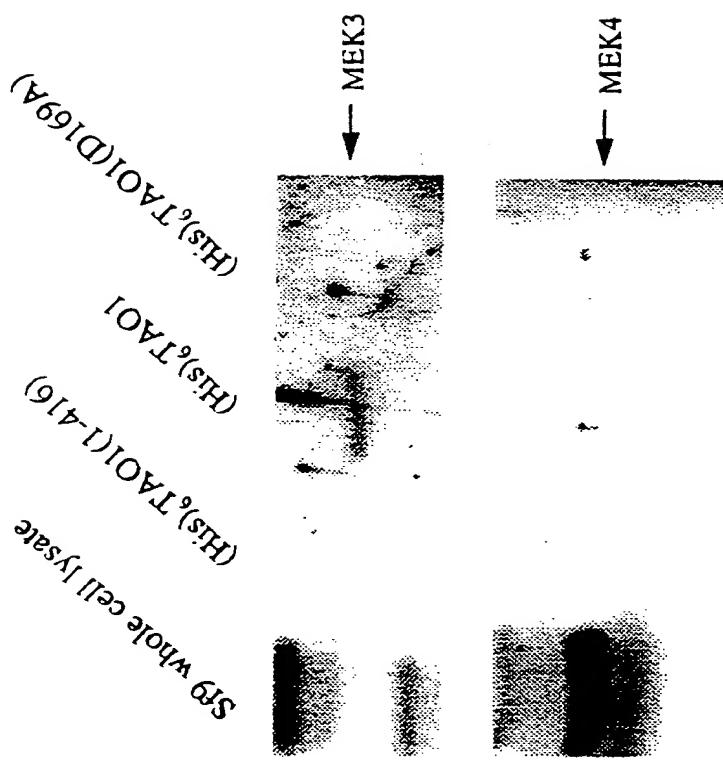


FIG. 11

Query: 2341 AGGAATCACCTACTGGAGACTACACCAAAGAGTGAGCACAAAGCTGTTCTGAAAAGACTC 2400  
Sbjct: 12 ACGANTCACCACTGGAGTTACTCCAAAGAAATGAGCACAAAACAATCTTAAAGACACTG 71

Query: 2401 AAGGAGGAACAGACTCGGAAGTTAGCCATCTGGCTGAGCAGTATGATCATAGCATTAAT 2460  
Sbjct: 72 AAAGATGAGCAGACAAGAAAACCTGCCTTNGGCAGAGCAGTATGAACAGAGTATAAT 131

Query: 2461 GAAATGCTCTCCACACAAGCTCTGCCTTGGATGAAGCACAGGAAGCAGAATGCCAGGTT 2520  
Sbjct: 132 GAAATGATGGCCTCTCANGCGTTACGGCTAGATGAGGCTCAAGAACAGAATGCCAGGC 191

Query: 2521 TTGAAGATGCAGCTACAGCAGGAACCTGGAGCTGTTGAATGCATATCAGAGCAAAATCAAG 2580  
Sbjct: 192 TTGAGGCTACAGCTCCAGCAGGAAATGGAGCTGCTCAACGCCCTACCAAGAGCAAAATCAAG 251

Query: 2581 ATGCAGGCTGAGGCCAACATGATCGAGAGCTTCGAGAGCTGGAACAAAGGGCTCCCTT 2640  
Sbjct: 252 ATGCAAACAGAGGCACAACATGAACGTGAGCTCCAGAAGCTAGAGCAGAGAGTGTCTTG 311

Query: 2641 CGGAGAGCACTCTAGAACAGAAGATTGAAGAACAGAGATGTTGGCTTGCAGAACATGAAACGC 2700  
Sbjct: 312 CGCAGAGCACACCTTGAGCAGAACAGATTGAAGAGGAGCTGGCTGCCCTTCAGAACAGGC 371

Query: 2701 ACAGAACGAATACGTAGCCTGCTCGAGGCCAGGCCAGAGAAATTGAAGCTTTT 2754  
Sbjct: 372 AGCGAGAGAATAAGAACCTATTGGAAAGGCAAGAGCGAGAGATTGGAAACCTTT 425

**FIG. 12**

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Query: 964 GAACAAACATGTGCTT 1 ..AGTTCCCTCTGATGTAGGGCGATCTTGAGGGATTTCTGGA 905
Sbjct: 79 GAACAAAGTCATGCCTTAATAGTTCTGCTGATGTTGGCCTTCTGAGGTATTTCTGCA 138
Query: 904 GGCAAGAAATCTACAAAGTTCGAAAATAATCAGACCATTCAATTAGACTGTAGTGTAGGGG 845
Sbjct: 139 AGCAGTAATCAACAAATCTCTAAAGGAGTCTGTCCATTCAATTAGACTGTAACGTTGGGG 198
Query: 844 ATTCAATTGGGCTATGTGATATAAGGCACTCATTGCATTCAATTAAATAAGGAGGCT 785
Sbjct: 199 AGTCATTCTGGGCAATGTGATATAAGGCACTCATTGCATTCAATTGTTGAAAAGGGCGGCT 258
Query: 784 TCCTCTCGGCTAATTCAATAACATGTTATTCCAAGAGACCATAACATCAACTTGCATCAT 725
Sbjct: 259 TCCGTTCCGCCAATTCAATAACAAAGTGTGCAAGTGACCAAATATCAACTTCCCCATCAT 318
Query: 724 ATTGTCTTCATCCATGGCTAAAATTACTTCTGGGGCCATCCAATATGGTGTCCCACAA 665
Sbjct: 319 ACTGTCTTCATCCATAGCTAACGATCACCTCTGGAGCCATCCAGTAAGGTGTGCCACGA 378
Query: 664 AAGAATTGGCAGGG 651
Sbjct: 379 AGGAGTTGGCCAGG 392

```

FIG. 13

09636246 162000

Query: 2792 ACCATGTTACTAAAACCTAATCTCATGCTTCAGAGTCAGAGCTCAATTCTCTGGCC 2733  
Sbjct: 90 ACCAAATTCCGAAATCCCATTCTGAGGCTCTCCATGTCAGAGCTCAATTCTCTCGCTCT 149

Query: 2732 TGGCGCTCGAGCAGGCTACGTATCGTTCTGTGCGTTCAATTCTGCAAAGCCAACATCTCT 2673  
Sbjct: 150 TGCCTTCCAATAGGTTCTTATTCTCTCGCTGCGTTCTGAAGGGCAGCCAGCTCC 209

Query: 2672 TCTTCATCTCTGTTCTAAAGAGTGCCTCCGAAGGGAGACCCTTGTTCCAGCTCTCGA 2613  
Sbjct: 210 TCTTCATCTCTGCTCAAGGTGTGGCTGCGCAGAGACACTCTCTGCTCTAGCTCTGG 269

Query: 2612 AGCTCTCGATCATGTTGGCCTCAGCCTGCATCTGATTTGCTCTGATATGCATTCAAC 2553  
Sbjct: 270 AGCTCACGTTCATGTTGTGCCCTGTTNGATCTGATTTGGNTCTGGTAGGCCTGAGC 329

Query: 2552 AGCTCCAGTTCTGCTGTAGCTGCATCTCAAAACCTGGCATTCTGCTTCTGTGCTTCA 2493  
Sbjct: 330 AGCTCCATTCTGCTGGAGCTGTAGCCTCAAGGCCTGGCATTCTGCTTCTGAGCCTCA 389

Query: 2492 TCCAAACGCAAGGTTGTGTGGAGAGCATTCTTAATGCTATGATCATACTGCTCAGCC 2433  
Sbjct: 390 TCTAGCCGTAACGCTTGAGAGGCCATCAATTCTTATACTCTGTTCTGCTCTGCC 449

Query: 2432 AAGATGGCTA 2423  
Sbjct: 450 AAAATGGCAA 459

**FIG. 14**

A

query: 2248 CAGCAGCTTAAGAGTTGAAGTCTAAAGAACTCCAAATAAAAAGCAGTTTCAGGATACC 2307  
bjct: 3 CAACAGCAGAAAACCTAAAGGCCATGAAATGAAATTAAAAACAGTTTCAGGACACT 62  
query: 2308 TGCaaaATTCAAACCAAGACAGTACAAAGCATTAAAGGAATCACCTACTGGAGACTACACCA 2367  
bjct: 63 TGCaaAGTACAGACCAAACAGTATAAAGCACTCAAGAATCACCAAGTTGGAAAGTTACTCCA 122  
query: 2368 AAGAGTGAGCACAAAGCTGTTCTGAAAAGACTCAAGGAGGAACAGACTCGGAAGTTAGCC 2427  
bjct: 123 AAGAATGAGCACAAAACAATCTTAAAGACACTGAAAGATGAGCAGACAAGAAAATTGCC 182  
query: 2428 ATCTTGGCTG 2437  
bjct: 183 ATTTTGGCAG 192

B

Query: 2437 GAGCAGTATGATCATAGCATTAATGAAATGCTCTCACACAAGCTCTGCCTTGGATGAA 2496  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Subject: 193 GAGCAGTATGAAACAGAGTATAATGAAATGATGGCCTCTCAAGCGTTACGGCTAGATGAG 252  
||| |||  
Query: 2497 GCACA 2501  
|||  
Subject: 253 GCTCA 257

*FIG. 15A and 15B*

FIG. 16

*A*

Query: 3228 GTGCATATGGTATATTTATTCTCTTTGTAAAGCGTTATGTTTGTGTTACTAATTGG 3287  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Sbjct: 31 GTGCATATGGTATATTTATTCTCTCTGTAAAGCGTTCTGTTTGTGTTACTAATTGG 90  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Query: 3288 GATGTCATAGTATTTGGCTGCCGGG 3312  
|||:|||||:|||||:|||||:  
Sbjct: 91 GATGTCATAGTACTTGGCTGCCGGG 115

*B*

Query: 3200 CTCACTTGGGTACTACCGGGTGGAAAGCTGTGCATATGGTATATT 3245  
|||:|||||:|||||:  
Sbjct: 1 CTCACTTGGGTACTACAGTGTGGAAAGCTGAGTGCATATGGTATATT 46

*FIG. 17A and 17B*

Query: 739 GATGTATGGTCTCTTGGAAATAACATGTATTGAATTAGCCGAGAGGAAGCCTCCTTATT 798  
Sbjct: 14 GATATTGGTCATTGGGTATCACGTGTATAGAGCTGGCGAACGTCGTCCACCAATTGTT 73  
Query: 799 AATATGAATGCAATGAGTGCCTTATATCACATAGCCC AAAATGAATCCCCTACACT 854  
Sbjct: 74 AGTATGAATGCAATGTCTGCCCTCTACCATATTGCTAAAATGATCCTCCAACTCT 129

**FIG. 18**

A

B

*FIG. 19A and 19B*

Query: 866 TCATTAGACTGTAGTGTAGGGGATTCACTTCTGGCTATGTGATATAAGGCACTCATTGCA 807  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Subject: 100 TCAGGATTCTGGAGCTCTGGAGTTCCATTAGTGGCTATCAGATACAATGCCCTGAGTGG 159  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Query: 806 TTCAATTAAATAAAGGAGGCTTCCTCTCGGCTAATTCAATACATGTTATTCCAAGAGAC 747  
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Subject: 160 TTTCAATTAAAGGTAAAGGGGGTTCACCTTCCACCATTTCAATTGCCATAATTCCAAGAGAC 219  
||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Query: 746 CATACATCAACTTT 733  
||| ||| ||| |||  
Subject: 220 CAGATATCAACTTT 233

FIG. 20